



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,990	02/24/2004	Noboru Suzuki	1232-5296	6772
27123 7590 10/01/2007 MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			EXAMINER KHAN, USMAN A	
			ART UNIT 2622	PAPER NUMBER
			NOTIFICATION DATE 10/01/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOPatentCommunications@Morganfinnegan.com
Shopkins@Morganfinnegan.com
Tquinones@Morganfinnegan.com

Office Action Summary

Application No.

10/786,990

Applicant(s)

SUZUKI, NOBORU

Examiner

Usman Khan

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Response to Arguments

Applicant's arguments filed on 07/16/2007 with respect to claims 1 - 10 have been considered but are moot in view of the new ground(s) of rejection.

Regarding objection to specification provided in the previous office action for failing to provide a descriptive title. Applicant has amended the title of the invention to overcome the objection to the specification.

Regarding objection to claim 7 provided in the previous office action for depending on it self. Applicant has amended the claim to overcome the objection to claim 7.

Regarding objection to claim 9 provided in the previous office action for not starting with "The". Applicant has amended the claim to overcome the objection to claim 9.

DETAILED ACTION

Claim 2 is objected to because of the following informalities: The claim states "wherein **the a** first and second". This part of the claim should be amended to "wherein **the** first and second". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 8 and 10 the applicant claims "**an image-taking device** comprising a first drivable part and a second drivable part". Whereas in the independent claim 1 from which these claims depend there is already "**An image taking control apparatus** controlling a first and second derivable parts of an image-taking device". It is unclear as to if there are two sets of "first and second derivable parts" one for the **image-taking device** and one set for the **image taking control apparatus**. Appropriate correction is required. Also it is unclear if the **image-taking device** claimed in claim 8 is the same as the **image taking control apparatus** of claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 - 3 and 8 - 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US patent No. 6,507,366) in further view of Yasukawa (US patent No. 5,614,982) in further view of Cortjens et al. (US patent No. 5,515,099).

Regarding **claim 1**, Lee teaches an image-taking control apparatus controlling a first and second drivable parts of an image-taking device (figure 1 item 7 system controller controlling the zoom/focus and pan/tilt driving parts of the camera).

Lee teaches most of the limitations of claim 1, However Lee fails to teach that the image-taking control apparatus comprising: a speed selector selecting an operation speed for each of the drivable parts, based on information on its current position, information on its target position, and information on a target operation time from a start command time at which an operation start of the plurality of drivable parts is commanded until the respective operations to the target positions finish; and a controller performing such control that each of the drivable parts operates at its operation speed selected by the speed selector; wherein the speed selector selects a specific operation speed for the first drivable part from selectable operation speeds of the first drivable part, the specific operation speed being an operation speed at which the operation to the target position can finish within the target operation time; and wherein the controller calculates an anticipated operation time needed until the operation of the first drivable part to its target position at the specific operation speed finishes, and lets the operation of the first drivable part start when a waiting time corresponding to a time difference between the anticipated operation time and the target operation time has passed after the start command time.

Yasukawa, on the other hand teaches that the image-taking control apparatus comprising: a speed selector selecting an operation speed for each of the drivable parts, based on information on its current position, information on its target position, and

Art Unit: 2622

information on a target operation time from a start command time at which an operation start of the plurality of drivable parts is commanded until the respective operations to the target positions finish; and a controller performing such control that each of the drivable parts operates at its operation speed selected by the speed selector; wherein the speed selector selects a specific operation speed for the first drivable part from selectable operation speeds of the first drivable part, the specific operation speed being an operation speed at which the operation to the target position can finish within the target operation time; and wherein the controller calculates an anticipated operation time needed until the operation of the first drivable part to its target position at the specific operation speed finishes, and lets the operation of the first drivable part start when a waiting time corresponding to a time difference between the anticipated operation time and the target operation time has passed after the start command time.

More specifically, Yasukawa teaches teach that the image-taking control apparatus comprising: a speed selector selecting an operation speed for each of the drivable parts (figure 1, item 6 and figure 3 item 38; column 3 lines 10 – 42, column 4 lines 16 *et seq.*, and column 5 lines 26 *et seq.*; ideal speed setting unit; when combined with Lee's invention will control operation speed for each of the drivable parts), based on information on its current position, information on its target position, and information on a target operation time from a start command time at which an operation start of the plurality of drivable parts is commanded until the respective operations to the target positions finish (figures 1, 3, and 6 – 8; column 3 lines 10 – 42, column 4 lines 16 *et seq.*, and column 5 lines 48 *et seq.* position detection unit, target drive position

Art Unit: 2622

calculation unit, and drive speed based on time); and a controller performing such control that each of the drivable parts operates at its operation speed selected by the speed selector (figure 1, item 6, figure 3 item 38, and figures and 6 – 8; column 3 lines 10 – 42, column 4 lines 16 *et seq.*, and column 5 lines 26 *et seq.*; ideal speed setting unit; when combined with Lee's invention will control operation speed for each of the drivable parts); wherein the speed selector selects a specific operation speed for the first drivable part from selectable operation speeds of the first drivable part (figure 1, item 6, figure 3 item 38, and figures and 6 – 8; column 3 lines 10 – 42, column 4 lines 16 *et seq.*, and column 5 lines 26 *et seq.*; ideal speed setting unit), the specific operation speed being an operation speed at which the operation to the target position can finish within the target operation time (figure 1, item 6, figure 3 item 38, and figures and 6 – 8; column 3 lines 10 – 42, column 4 lines 16 *et seq.*, and column 5 lines 26 *et seq.*; ideal speed setting unit using current position and target position information); and wherein the controller calculates an anticipated operation time needed until the operation of the first drivable part to its target position at the specific operation speed finishes (figure 1, item 6, figure 3 item 38, and figures and 6 – 8; column 3 lines 10 – 42, column 4 lines 16 *et seq.*, and column 5 lines 26 *et seq.*; ideal speed setting unit using current position and target position information), and lets the operation of the first drivable part start when a waiting time corresponding to a time difference between the anticipated operation time and the target operation time has passed after the start command time (figures 7a-7b and 8a-8b and column 7 lines 59 *et seq.* ideal speed in terms of time and drive are used in driving the unit).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Yasukawa with the teachings of Lee because as stated in column 2, line 50 – column 3 line 9 Yasukawa teaches that using his invention will realize greater auto-focusing capabilities and accurate and faster auto-focusing also greatly reducing the load on memory capacity and on the calculation processing.

Lee in further view of Yasukawa teaches most of the limitations of claim 1, However Lee in further view of Yasukawa fail to teach that the operations of the first and second drivable parts from their current positions to their target positions finish substantially simultaneously. Cortjens et al., on the other hand teaches that the operations of the first and second drivable parts from their current positions to their target positions finish substantially simultaneously.

More specifically, Cortjens et al. teaches teach that the operations of the first and second drivable parts from their current positions to their target positions finish substantially simultaneously (column 16 lines 35 – 53; in this passage Cortjens et al. teaches that by synchronizing the movements of the pan and tilt mechanisms in this manner the camera will reach the desired position, with respect to both axes, at approximately the same time).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Cortjens et al. with the teachings of Lee in further view of Yasukawa because as stated in column 16 lines 35 – 53 Cortjens et al. teaches that using his invention has the desirable effect of making the camera

positioning appear smooth. Otherwise, the camera may reach the desired position with respect to one axis first, for example the vertical axis, and then have to continue moving with respect to the other axis until the desired location is achieved, which makes the camera movement appear awkward.

Regarding **claim 2**, as mentioned above in the discussion of claim 1 Lee in further view of Yasukawa in further view of Cortjens et al. teach all of the limitations of the parent claim. Additionally, Lee teaches that the first and second drivable parts of the image-taking device are drivable parts related to changes in zoom, focus and image-taking direction (figure 1 item 7 system controller controlling the zoom/focus and pan/tilt [i.e. direction] driving parts of the camera).

Regarding **claim 3**, as mentioned above in the discussion of claim 1 Lee in further view of Yasukawa in further view of Cortjens et al. teach all of the limitations of the parent claim. Additionally, Lee teaches that the speed selector selects for the first drivable part, of the selectable operation speeds, an operation speed at which the time difference becomes shortest (column 7 lines 59 – 67, speed chosen to greatly reduce time).

Regarding **claim 8**, Lee teaches an image-taking system, comprising: an image-taking device comprising a first drivable part and a second drivable part (figure 1 item 7 system controller controlling the zoom/focus and pan/tilt driving parts of the camera),

and an image-taking control apparatus controlling a first and second drivable parts of an image-taking device (figure 1 item 7 system controller controlling the zoom/focus and pan/tilt driving parts of the camera).

Regarding **claim 9**, as mentioned above in the discussion of claim 1 Lee in further view of Yasukawa in further view of Cortjens et al. teach all of the limitations of the parent claim. Additionally, Lee teaches that the image-taking device comprises a camera whose image-taking field angle (figure 1 pan/tilt and figures 2a-b) and focusing state can be changed (figure 1 zoom/focus), and a pan head supporting the camera and capable of a panning and a tilting operation (figures 2a-b).

Regarding **claim 10**, Lee teaches an image-taking system, comprising: an image-taking device comprising a first and second drivable parts (figure 1 item 7 system controller controlling the zoom/focus and pan/tilt driving parts of the camera), and an image-taking control apparatus controlling a first and second drivable parts of an image-taking device (figure 1 item 7 system controller controlling the zoom/focus and pan/tilt driving parts of the camera). An input device with which information specifying the target positions and the target operation time can be input into the image-taking control apparatus (Abstract and column 1 lines 54 *et seq.*; object tracking using object vectors and object search region).

Claims 4 – 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US patent No. 6,507,366) in further view of Yasukawa (US patent No. 5,614,982) in further view of Cortjens et al. (US patent No. 5,515,099) in further view of Examiners Official Notice.

Regarding **claim 4**, as mentioned above in the discussion of claim 1 Lee in further view of Yasukawa in further view of Cortjens et al. teach all of the limitations of the parent claim. Additionally, Lee teaches that the speed selector selects for the first drivable part, of the selectable operation speeds, an operation speed at which the time difference becomes longest.

However, Lee in further view of Yasukawa in further view of Cortjens et al. fail to teach that the speed selector selects for the first drivable part, of the selectable operation speeds, an operation speed at which the time difference becomes longest.

The examiner takes Official Notice that it is old and well known in the art to have the speed selector select an operation speed at which the time difference becomes longest.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the speed selector select an focus operation speed at which the time difference becomes longest to compensate for external vibration of the camera and also to focus in precisely into a subject.

Regarding **claim 5**, as mentioned above in the discussion of claim 1 Lee in further view of Yasukawa in further view of Cortjens et al. teach all of the limitations of the parent claim.

However, Lee in further view of Yasukawa in further view of Cortjens et al. fail to teach that the controller sets the waiting time to zero regardless of the time difference when the controller lets the first drivable part perform an operation such that an image-taking field angle is changed toward a wide-angle side.

The examiner takes Official Notice that it is old and well known in the art to have a controller that sets the waiting time to zero regardless of the time difference when the controller lets the first drivable part perform an operation such that an image-taking field angle is changed toward a wide-angle side.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the controller set the waiting time to zero regardless of the time difference when the controller lets the first drivable part perform an operation such that an image-taking field angle is changed toward a wide-angle side for faster focusing of the lens without any delay.

Regarding **claim 6**, as mentioned above in the discussion of claim 1 Lee in further view of Yasukawa in further view of Cortjens et al. teach all of the limitations of the parent claim.

However, Lee in further view of Yasukawa in further view of Cortjens et al. fail to teach that the controller sets the waiting time to zero regardless of the time difference

when the controller lets the first drivable part perform an operation such that an image-taking field angle is changed toward a telephoto side.

The examiner takes Official Notice that it is old and well known in the art to have a controller that sets the waiting time to zero regardless of the time difference when the controller lets the first drivable part perform an operation such that an image-taking field angle is changed toward a telephoto side.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the controller set the waiting time to zero regardless of the time difference when the controller lets the first drivable part perform an operation such that an image-taking field angle is changed toward a telephoto side for faster focusing of the lens without any delay.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US patent No. 6,507,366) in further view of Yasukawa (US patent No. 5,614,982) in further view of Cortjens et al. (US patent No. 5,515,099) in further view of Applicants admitted prior art (hereinafter AAPA).

Regarding **claim 7**, as mentioned above in the discussion of claims 1 Lee in further view of Yasukawa in further view of Cortjens et al. teach all of the limitations of the parent claim.

Additionally, Lee teaches that the operation speed of the first drivable part can be selected only in steps (column 3 lines 11 – 27 pulse signals controlling the pan and tilt drive parts)

However, Lee in further view of Yasukawa in further view of Cortjens et al. fail to disclose the operation speed of the second drivable part can be selected in non-steps. AAPA, on the other hand discloses the operation speed of the drivable part can be selected in non-steps.

More specifically, AAPA discloses that it is well know in the art to have the drivable part includes a drivable part whose operation speed can be selected in non-steps (paragraph 0005 page 2 of application; shot operation function).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the prior art teachings by the applicant with the teachings of Lee in further view of Yasukawa in further view of Cortjens et al. to make the transition less irritating as disclosed in paragraph 0004 page 2 of application by the applicant.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any


extension fee pursuant to 37 CFR1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usman Khan whose telephone number is (571) 270-1131. The examiner can normally be reached on Mon-Thru 6:45-4:15; Fri 6:45-3:15 or Alt. Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Usman Khan
09/18/2007
Patent Examiner
Art Unit 2622


DAVID OMETZ
SUPERVISORY PATENT EXAMINER